REMARKS/ARGUMENTS

Favorable consideration of this application and entry of the foregoing amendments are respectfully requested.

Claim 10 has been revised to define the invention with additional clarity and new claims 17-21 have been added.

The amendment of claim 10 finds support throughout the application, especially at page 23, lines 2-9, where the advantages of heterologous prime-boost are noted. The application contains many examples of using different compositions to prime and boost, e.g., pages 8 to 9 describe a range of possible priming compositions for use in a prime-boost regime where adenovirus is used in the boosting composition. New claim 17 depends from claim 10 and specifies that the priming composition is non-adenoviral. Support for claim 17 is found, for example, at page 7, line 26 to page 8, line 1, where it is explained that the priming composition can be a vector, but generally other than adenoviral.

New claims 18-21 depend from claim 10 and specify particular priming compositions. Basis for these new claims is found, for example, at pages 7-8.

In response to the Examiner's requirement for restriction, Applicants elect Group III (claims 10-13, the priming composition comprising nucleic acid encoding the antigen). The election is made with traverse.

The Examiner's requirement for restriction is based on the Examiner's finding that the inventions of Groups I, II and III lack the same or corresponding special technical features. The Examiner contends that the groups of inventions do not share the same or a corresponding special technical feature defining a contribution over Kazanji et al (*Int. J. Cancer* **71** 300-307, 1997).

The Examiner's assertions to the contrary, Applicants submit that all three groups do involve the same special technical feature, which defines a novel and inventive contribution over Kazanji et al, for the reasons as detailed below.

All three groups of inventions refer to administration of a replication-deficient adenoviral vector encoding an antigen, to boost an immune response to the antigen in an individual, where the individual was previously primed with a heterologous composition. This regime, in which the priming and boosting compositions are different from one another, is referred to as "heterologous prime-boost".

Claim 10 as now presented explicitly states that the boosting composition as used in the method is heterologous, i.e., different from the priming composition. Claim 9 already states that the priming composition is non-adenoviral, and, therefore, different from the adenoviral boosting composition. Heterologous prime-boost is thus a feature of independent claims 9 and 10 and, through their dependency, of claims 11 to 21.

Heterologous prime-boost is not disclosed in Kazanji et al, and defines an inventive contribution over the prior art. Therefore, it is a special technical feature within the meaning of Rule 13 PCT and unifies all the claims.

In Kazanji et al, priming immunizations of adenoviral or plasmid DNA vectors encoding HTLV-1 antigens were followed by boosting immunizations of HTLV-1 proteins or HTLV-1 antigens in the same vector as the prime (see Table 1A and Table 1B on page 301, and also the passage bridging pages 302-303). In each case, the same composition was used to prime and to boost the immune response, i.e., this paper describes only "homologous prime-boost". No difference in CTL response was seen between the responses to the different boosts (Figure 4, page 305).

In contrast to Kazanji et al's disclosure, the invention as claimed in all three groups in this application concerns *heterologous* prime-boost vaccination, in which an adenovirus is used to boost an immune response primed by a different composition. Applicants have demonstrated that heterologous prime-boost gives a greatly increased CD8+ T cell response compared with homologous prime-boost (see Figure 2 of the subject application, and page 23, lines 2-9).

Heterologous prime-boost is not disclosed nor suggested by Kazanji *et al.*. The concept of using a different compositions to prime and boost the immune response, according to the claimed methods, is a novel and unobvious feature, i.e., a special technical feature, as required to unify the claimed subject-matter under Rule 13 PCT.

In addition to the above, it is submitted that no undue burden would be placed on the Examiner if the subject matter of all of the claims were to be searched and all of the claims examined in the same application.

In view of the above, the Examiner is requested to reconsider and withdraw the requirement for restriction.

An early and favorable Action is awaited.

Respectfully submitted,

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